

### AMENDMENTS TO THE ABSTRACT

Cyclic esters of hydroxy organic acids can be produced and recovered via azeotropic distillation. In certain embodiments cyclic esters, such as glycolide and lactide, can be produced from a fermentation broth or other feed stream that contains comprises a hydroxy organic acid, an ammonium salt of a hydroxy organic acid, an amide of a hydroxy organic acid, or an ester of a hydroxy organic acid using azeotropic distillation. The hydroxy organic acid of the feed stream or the hydroxy organic acid derived from the feed stream by decomposition is reacted to produce the cyclic ester. In other embodiments a crude composition of a cyclic ester of an organic ester can be purified using azeotropic distillation.